ROLES AND RESPONSIBILITIES FOR BY 2005 AND BEYOND CTC ESTIMATES

Project Category	Project Status (see Definitions)	Estimate Requirements	Responsible Office for Estimate	QC Requirements	Responsible Office for QC	Estimate with QC evidence Submitted to CX
All except CWM & PRP	New	A	District	B	District	1-15-2004
All except CWM & PRP	Out Year	D	District	B	District	1-15-2004
All except CWM & PRP	Active	C	District	B	District	1-15-2004
CWM	New, Out Year, & Active	Supplied by HNC	District with HNC Coordination	B	District with HNC Coordination	1-15-2004
PRP Projects	New, Out Year and Active	A	District with PRP District Coordination	B	District with PRP District Coordination	Submission to CX for QA Not Required

Code Explanations:
   A – See Attachment A, "Instructions for Developing CTC Estimates"
   B – See Attachment B, "Quality Control (QC) Instructions for Reviewing CTC Estimates."
   C – See Attachment C, "Instructions for Updating Active Project Estimates."
   D – If an existing RACER estimate is used, it must meet the requirements of Attachment A in order to allow the HTRW CX to price level and upload to FUDSMIS.

FUDSMIS Input:
   1. **New and Outyear Projects (Except CWM and PRP projects)**. The HTRW CX will price level and upload the phase cost data into FUDSMIS if the estimate is developed in RACER 2003 and meets all the requirements contained in Attachment B, "Quality Control (QC) Instructions for Reviewing CTC Estimates" and the key *italicized* requirements in Attachment A, "Instructions for Developing CTC Estimates". [The *italicized* requirements are necessary in order to use the RACER Post Processor to extract the phase cost data from the RACER estimate for upload to FUDSMIS.] If the estimate does not meet these requirements, the District will be informed and will be responsible to price level the estimate and enter phase cost data into FUDSMIS. The HTRW CX will submit a final report to HQUSACE, Divisions, and Districts on the projects reviewed and the costs that were price leveled and uploaded into FUDSMIS.
   2. **Active Projects.** The District is responsible to update the estimate and enter the phase cost data into FUDSMIS.
   3. **CWM and PRP Projects.** The District is responsible to enter phase cost data into FUDSMIS . Refer to Attachment A for detailed instructions.

Definitions:
   1. **New Projects** – These are projects that have been approved by the Division subsequent to last year's update. These projects should not have a CTC estimate currently in FUDSMIS.
   2. **Out Year Projects** – These are projects with an existing RACER 2003 estimate **AND**:
      a. For HTRW projects, the RI/FS is in the Future.
      b. For OEW or OEW/CWM projects, the EE/CA is in the Future.
      c. For CON/HTRW or BD/DR projects, the RD is in the Future.
   3. **Active Projects** - These are projects not included in the definitions for New or Outyear Projects, above.

Enclosure

INSTRUCTIONS FOR DEVELOPING CTC ESTIMATES for BY 05 and Beyond

In an effort to aid the districts in developing creditable and more defensible estimates for the FUDS program the following instructions are offered. These instructions include step-by-step procedures and requirements for developing cost to complete (CTC) estimates with the RACER software, developing cost estimates for PRP projects, and instructions for this year's OEW and CWM CTC project estimates. The instructions incorporate items of concern with previous CTC estimates that surfaced during the recent audits. The intent of this document is to enhance the estimating process to help the districts pass future audits of the FUDS program.

1.0 PRP Project Estimate Preparation – PRP projects became an issue during this years audit process where questions were raised on how the costs were developed, and what type of documentation was available to support the costs in FUDSMIS. Normally, costs associated with PRP projects in FUDSMIS represents district 'level of effort' costs associated with negotiation/litigation support. Also, included are amounts for which the ER-FUDS account is responsible under signed agreements. To support 'level of effort' and signed agreement costs in FUDSMIS, the district should document the following information in the estimate:

- PRP 'level of effort' estimates may be a simple spreadsheet showing number of project management, attorney, technical, etc. hours times the respective hourly rates.
- PRP estimates shall include any contract support needs for PRP investigation/records collection.
- Provide a brief explanation of duties performed for the level of effort to support the man-hours.
- Estimates shall be forecast for as many years as the PM feels is needed and shall be divided into Project Negotiations and Technical participation, if any.
- The signed agreement will be made part of the supporting documentation, and other pertinent project information used as the basis for including costs in FUDSMIS. Estimates may include, estimates developed during the study phase, RACER estimates, MCACES estimates, etc. If there is no signed legal agreement, no programmed amounts will be input into FUDSMIS.

2.0 OEW and CWM Project CTC Estimates - In the past years the HTRW-CX has completed development of the OEW estimates, both new and out-year. However, this year **only** the **new** estimates will be developed by the CX. In order for the new OEW project estimates to be completed by the HTRW-CX, the districts must submit a response, NLT 15 December 2003, to the HTRW-CX, Kate Peterson, requesting that the HTRW-CX develop the new estimate. In order for the HTRW CX to develop the estimate, the INPR and ASR, if applicable, must accompany the request sent to the HTRW-CX. The deadline and documents are needed to ensure that the new estimate can be completed in timely manner and ensure that the estimate will meet the DOD IG requirements. The DOD IG requirements are for the districts to document a QC review, and the HTRW and/or OE CX to perform a QA review. The out-year OEW estimates

developed in FY 2003 and provided to the districts via a memo dated 19 September 2003 will be re-submitted to the HTRW-CX with the QC review documented (see Attachment B). These estimates will be QA'd by the HTRW-CX, price leveled and uploaded into FUDSMIS.

The OE CX will continue to provide all new, and out-year CWM estimates to the districts. Where applicable, the OE CX will also provide assistance to the districts for active CWM estimates. This year the OE CX is updating all the CWM estimates and performing a QC review and will provide the estimate and review information to the districts NLT January 15, 2004. The districts will at that time be required to input the CWM estimate into FUDSMIS. These estimates will be QA'd by the OE CX to ensure the estimate was input into FUDSMIS.
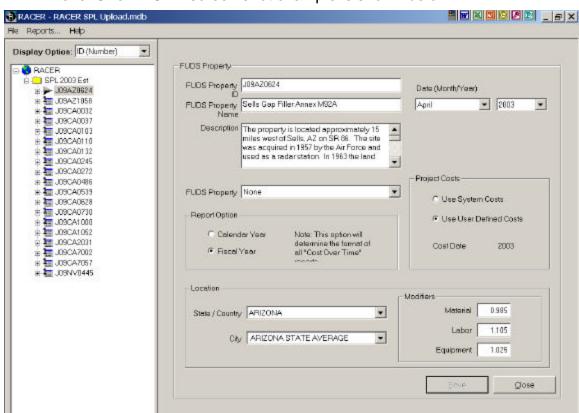
3.0 HTRW, CON/HTRW, and BD/DR Project – General Instructions for Developing RACER CTC Estimate Structure – The following are general instructions for developing more creditable and defensible RACER CTC estimates and should be followed for the estimates. This document also outlines specific requirements that <u>must</u> be incorporated in the RACER estimates in order for the HTRW-CX to price level, and create an upload file into FUDSMIS for the estimates submitted to the CX. These specific requirements are shown in '***bold Italic***'. Please ensure the RACER generated HTRW, CON/HTRW, and BD/DR project estimates incorporate the bold italic requirements. The estimates that the HTRW-CX provided the districts in last year's effort, already meets these specific requirements.

- **RACER Preferences:** - Preferences in RACER 2003 software should be checked to ensure correct FUDS nomenclature and that correct markup templates are loaded. If not, preferences in RACER must be modified to include standard FUDS nomenclature within the RACER hierarchy. The Level Names in RACER will be modified as follows: Level One will be called "FUDS Property", Level Two will be called "Project" and Level Three will be called "Phase". Level One Categories will be left blank. Level Two Types will include the following selections: HTRW, CON/HTRW, BD/DR, and OEW. Also, the RACER Preference menu is where the Markup Templates are added. FUDS specific RACER Preferences and Markup Templates were provided to the districts during last years FUDS RACER training and should be used again for this years effort. Upon request by the district, the HTRW-CX can provide these preferences again this year if they do not have them.

- **Folder Names** – Folders (Level 0 in the RACER hierarchy) will be named using the three-letter abbreviation for the USACE District. Example: Omaha District would be 'NWO'.

- **Level Names** – As described above, the default names for the first three RACER estimating levels will be standardized as follows as a result of importing the preferences provided into RACER:

    - Level 1 – FUDS Property

    - Level 2 – Project

    - Level 3 - Phase

3.1 RACER Level One CTC Estimate Requirements

- ***The "FUDS Property" field must be the nine digit number assigned to the project as identified in FUDSMIS***

- ***The "FUDS Property Name" field must be that exactly as identified in FUDSMIS.***

- The "Date" field must be the date the estimate is being prepared or updated if it is an existing estimate.

- The "Property" field input will be 'none'.

- "Cost Database" field will utilize User-Defined Costs selection in RACER.

- "Reporting Option" field will use the Fiscal Year reporting option.

- The "Description" field should contain property level documentation to include various aspects of the property. Much of the information needed to fill out the property description can be obtained from the INPR. Some of the data elements that will be captured in the comment field are:

    - A brief narrative that describes the property history

    - Location of property

    - Other instructions, if any, provided by the District PM

- "Location and Modifiers" will be the state and closest city or installation the project is in or near. If for some reason the estimator changes the factors, documentation as to the basis for the change must included in the description field.

- Level One RACER screen shot example is shown below:
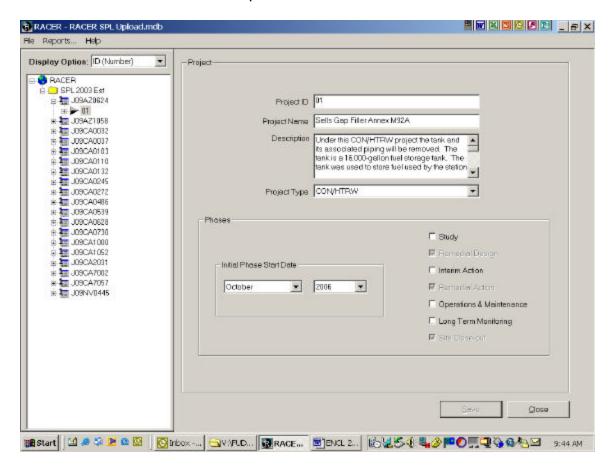

3.2 RACER Level Two CTC Estimate Requirements

- ***The "Project ID" field must be the two-digit number assigned to the project as identified in FUDSMIS.***

- ***The "Project Name" field must be that exactly as identified in FUDSMIS.***

- The "Initial Phase Start Date" field will reflect the anticipated start date for the first phase.

- ***The "Project Type" field input must be that of the type of project being estimated (HTRW, CON/HTRW, BD/DR, or OEW).***

- The "Description" field should contain project level information to document specific aspects of the project, and the estimate being developed. Some of the data elements that must be captured in the comment field are:

  - Remediation Expert (RE) name and telephone number

  - Cost Estimator (CE) name and telephone number

  - QC reviewer name and telephone number

  - District PM name and telephone number

- Type of documents the estimating team relied upon (e.g., INPR) in developing the estimate

  - Basis for Project start date (e.g., per District PM)

  - Reasons for the change from the most recent estimate

  - Other narrative descriptions that describe the project (project history, media and contaminate being remediated, assumed approaches, etc.)

  - Other instructions, if any, provided by the District PM

- Phases at this level will include only those phases relevant to the type and status of the project being estimated. RACER phases for each type of project and the phase naming conventions specific to FUDS are identified in Table 1 below.

Table 1. Phase Naming Conventions

FUDS Program Phase	RACER Phase
SI	Study
RI/FS	Study
EE/CA	Study
RD	Remedial Design
RA-C	Remedial Action
RA-O	Operation & Maintenance
LTM	Long Term Monitoring
PCO	Site Close Out

- Level 2 screen shot example below:

3.3 RACER Level Three CTC Estimate Requirements

- ***The "Phase Name" – The phase name for this field must exactly be in accordance with the abbreviations shown in Table 1 above, depending on the phase being estimated. The phase name cannot be spelled out and the abbreviations must include the hyphenations and back slashes where applicable.***

- The "Media/Waste Type" field will include the primary waste being treated in the estimate.

- The "Secondary Media/Waste Type" field will include the secondary waste being treated in the estimate, if applicable.

- The "Contaminant" field will include the primary contaminant being treated.

- The "Secondary Contaminant" field will include the secondary contaminate being treated, if applicable.
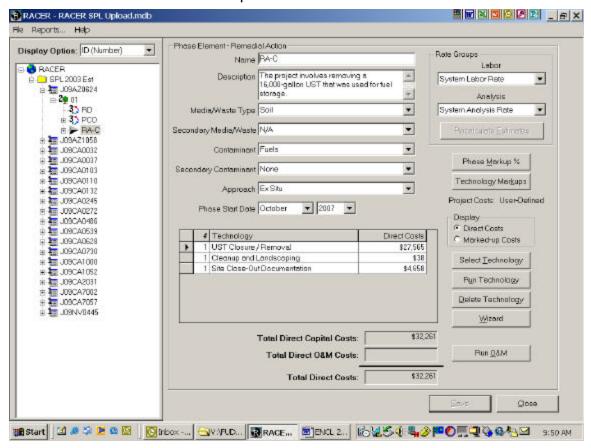
- The "Approach" field will include the approach used depending on the technologies being estimated (i.e., If the Excavation and Off-site T&D technologies are chosen, then the approach would be "ex-situ").

- The "Phase Start Date" should be the anticipated start date for the phase being estimated.

- The "Phase Markup %" button should be chosen to select the proper FUDS markup template for the specific phase and project type being estimated. The correct markup templates will be loaded in the system when the correct preferences are imported (see Section 1.0 above). The FUDS markup templates are based on the RACER default markup template, and include an allowance of 13% for Owner Costs. The markup templates will also include Risk/Contingency allowances per Table 2.

Table 2. Risk/Contingency Allowances by Phase

FUDS Phase	Risk/Contingency
SI	5.00%
RI/FS	5.00%
EE/CA	5.00%
RD	15.00%
RA-C	15.00%
RA-O	15.00%
LTM	5.00%
PCO	5.00%

- "Rate Groups" and "Technology Markup" fields on this screen will be left as defaulted in RACER.

- The "Description" field must be used to document various aspects of the phase being estimated. The applicable data elements that will be captured in the comment field are:
    - Rationale for technology selection.
    - Statement about consideration and evaluation of use of innovative technology.
    - Statement about duration of any cost element that has cost over time (i.e., RA-O phase, and the Monitoring and Natural Attenuation technology models).

- Specific regulatory procedures or concerns that affect the overall cost estimate.

- Any unique or special site specific considerations that have a significant effect on the CTC estimate.

- Level 3 screen shot example below:

3.4 RACER Level 4 (Technology Level) CTC Estimate Requirements

- Each technology being estimated has a "Comments tab". This field must be filled out and is intended to document things specific to the technology. Applicable data elements that will be captured in the comment field are:

  - Rationale for unique parameter selections (i.e., if the excavation model is used, show in the comments, how you derived at the quantity to be excavated, etc).

  - Explain secondary default parameter changes.

  - Explain changes and/or additions to assembly items.

  - List any quotes used for pricing.

- Statement about duration of any cost element that has cost over time (i.e., RA-O phase, and the Monitoring and Natural Attenuation technology models).

- Any unique or special site specific considerations that have a significant effect on the technology being estimated.

QUALITY CONTROL (QC) INSTRUCTIONS
FOR REVIEWING CTC ESTIMATES

GENERAL

The District must ensure a strong internal control system is in place to provide adequate QC of the CTC estimates prepared for the FUDS program. Since these estimates are used for reporting environmental liabilities on DoD financial statements, they in fact *become* accounting estimates, and therefore must meet financial management regulation requirements. Accordingly, adequate documentation must be maintained for an effective audit trail. The district must ensure that pertinent project-related documents are readily assessable that support the underlying factors, assumptions, and costs of the CTC estimate, in order to meet the accounting standards requiring that relevant, reliable, and sufficient data support the estimate.

The District Project Manager must ensure completion of a QC review for each CTC estimate and sign the accompanying "FY 05 FUDS Cost to Complete Quality Control Review Checklist". The following provides information on how to respond to the attached checklist questions.

Explanation of Quality Control Checklist Items:

1. Does the estimate include background information? In order to respond with a "Yes", you must ensure the estimate includes all of the following information.
    a) Remediation Expert (RE) name and telephone number consulted during estimate development
    b) Cost Estimator (CE) name and telephone number who developed the estimate
    c) District Project Manager Name and telephone number who is responsible for the project estimate name
    d) Documents on which the estimate was developed from (e.g., INPR, SI)
    e) Basis for Project start date (i.e., per District PM)
    f) Other narrative descriptions that describe the project (project history, media and contaminant being remediatied, assumed approaches, etc.)
    g) Other instructions, if any, provided by the District PM

2. Is sound estimating methodology used and the assumptions used reasonable? In order to respond with a "Yes", you must ensure the estimate includes all of the following information.
    a) Rationale for technology selections documented in estimate
    b) Rationale for quantities and costs (In RACER this would be notes that provide reasons for the required parameter entries, reasons for changes to the secondary parameters and assemblies)
    c) Unique or special site specific considerations and/or regulatory requirements that may have a significant effect on the technologies selected

3. <u>Does the estimate include all relevant phases and costs to complete the cleanup?</u> In order to respond with a "Yes", you must ensure the estimate includes all of the following information.
    a) Only phases relevant to the type of project and status (stage) of the project are being estimated (e.g., all phases that reflect costs for BY 05 and beyond that are probable to complete the project)
    b) All the phases included in the estimate reflect the proper FUDSMIS entries for project, i.e., SI, RI/FS, EE/CA, RD, RA-C, RA-O, LTM, and PCO

4. <u>Does the Project Delivery Team (that may include an estimator) include personnel that are qualified and has the PDT received applicable training to prepare the CTC estimate?</u> In order to respond with a "Yes", you must ensure the PDT has the following training and experience.
    a) RACER 2002 or later training
    b) Experience in developing estimates
    c) Formal or informal environmental training
    d) FUDS Cost to Complete training

5. <u>Is there an adequate audit trail?</u> In order to respond with a "Yes", you must ensure all of the following information.
    a) The estimate is consistent with FUDSMIS entries
    b) The estimate can be replicated
        i.   Rationale of technology selection, quantities, physical aspects, and regulatory requirements are documented and other sources documents used to determine any of the above are referenced.
        ii. Notes explain where the source documentation can be located, e.g., project files.
        iii. Comparison of the prior year estimate to the current year estimate is documented and the basis for the change is explained.

6. <u>Is the estimate prepared in the current year dollars?</u> In order to respond with a "Yes", the District-prepared estimate must include a 1.5% price level increase in cost from last year's estimate. [Estimates developed with RACER 2003 and uploaded by the HTRW CX will be price leveled to current costs by the HTRW CX prior to uploading into FUDSMIS.]

7. <u>Is the QC review documented?</u> In order to respond with a "Yes", you must ensure the estimate includes all of the following information
    a) The checklist completed and signed
    b) The name and qualifications of the QC reviewer are documented on the signed checklist.

BY 05 FUDS Cost to Complete Quality Control Review Checklist

FUDS Property Name: _____ FUDS Project Description: _____ FUDS Property Number: _____ FUDS Project Number: _____	Yes	No
1. Does the estimate include background information?		
2. Is sound estimating methodology used and the assumptions used reasonable?		
3. Does the estimate include all relevant phases and costs to complete the cleanup?		
4. Does the Project Delivery Team (that may include an estimator) include personnel that are qualified and has the PDT received applicable training to prepare the CTC estimate?		
5. Is there an adequate audit trail?		
6. Is the estimate prepared in the current year dollars?		
7. Is the QC review documented?		
Project Manager Signature: _____ Date: _____/_____/_____		
Comments:		

INSTRUCTIONS FOR UPDATING ACTIVE PROJECT ESTIMATES

1. **Update existing CTC estimate, in whatever format, to reflect the work that is scheduled in the BY05 and beyond.**

2. **Coordinate all active OEW and CWM project estimates with HNC.**

3. **Perform Quality Control by referring to Attachment B, "Quality Control Instructions for Reviewing CTC Estimates".**

4. **Enter the phase cost data into FUDSMIS.**

5. **If estimate was developed in RACER 2003, submit the RACER.mdb file and the RACER Cost-Over-Time (COT) Report to the HTRW CX for QA.**

6. **If the estimate was developed in MCACES or if using a contractor prepared estimate, submit the estimate to the HTRW CX for QA.**